

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A quantum dot light-emitting diode comprising:  
a ~~pair of top electrode and;~~  
a bottom electrodes-electrode disposed substantially opposite the top electrode;  
and  
an inorganic quantum dot light-emitting layer provided between the ~~electrodes top~~  
electrode and the bottom electrode; and  
~~wherein an inorganic electron transport layer is formed~~disposed between the  
inorganic quantum dot light-emitting layer and the top electrode.

2. (Currently Amended) The quantum dot light-emitting diode according to claim 1, wherein the quantum dot light-emitting diode further comprises:  
a substrate disposed beneath the bottom electrode; and  
~~an anode,~~ a hole transport layer disposed on the bottom electrode,  
wherein the bottom electrode is an anode and the top electrode is a cathode, and  
wherein the anode, the hole transport layer, the~~[[a]]~~ inorganic quantum dot light-emitting layer, ~~[[an]]~~the inorganic electron transport layer and ~~[[a]]~~the cathode are formed in this order on ~~the~~the~~[[a]]~~ substrate.

3. (Previously Presented) The quantum dot light-emitting diode according to claim 1, wherein the inorganic electron transport layer is made of an oxide selected from the group consisting of TiO<sub>2</sub>, ZnO, SiO<sub>2</sub>, SnO<sub>2</sub>, WO<sub>3</sub>, Ta<sub>2</sub>O<sub>3</sub>, BaTiO<sub>3</sub>, BaZrO<sub>3</sub>, ZrO<sub>2</sub>, HfO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub> and ZrSiO<sub>4</sub>; the nitride Si<sub>3</sub>N<sub>4</sub>; or a semiconductor compound selected from the group consisting of CdS, ZnSe and ZnS.

4. (Currently Amended) The quantum dot light-emitting diode according to claim 1, wherein the inorganic quantum dot light-emitting layer is made of a material selected from the group consisting of: Group II-VI compound semiconductor nanocrystals, including CdS, CdSe, CdTe, ZnS, ZnSe, ZnTe, HgS, HgSe and HgTe; Group III-V compound semiconductor nanocrystals, including GaN, GaP, GaAs, InP and InAs; PbS; PbSe; PbTe; CdSe/ZnS; CdS/ZnSe; and InP/ZnS.

5. (Previously Presented) The quantum dot light-emitting diode according to claim 1, wherein the inorganic electron transport layer is formed by a solution coating process selected from the group consisting of sol-gel coating, spin coating, printing, casting and spraying, or a vapor coating process selected from the group consisting of chemical vapor deposition (CVD), sputtering, e-beam evaporation and vacuum deposition.

6. (Original) The quantum dot light-emitting diode according to claim 2, wherein the hole transport layer is made of a material selected from the group consisting of poly(3,4-ethylenedioxythiophene) (PEDOT)/polystyrene para-sulfonate (PSS) derivatives, poly-N-vinylcarbazole derivatives, polyphenylenevinylene derivatives, polyparaphenylene derivatives, polymethacrylate derivatives, poly(9,9-octylfluorene) derivatives, poly(spiro-fluorene) derivatives, N,N'-diphenyl-N,N'-bis(3-methylphenyl)-(1,1'-biphenyl)-4,4'-diamine (TPD), N,N'-di(naphthalene-1-yl)-N,N'diphenyl-benzidine (NPB), tris(3-methylphenylphenylamino)-triphenylamine (m-MTDATA), and poly(9,9'-dioctylfluorene-co-N-(4-butylphenyl)diphenylamine (TFB).

7. (Previously Presented) The quantum dot light-emitting diode according to claim 2, wherein the inorganic electron transport layer is made of an oxide selected from the group consisting of TiO<sub>2</sub>, ZnO, SiO<sub>2</sub>, SnO<sub>2</sub>, WO<sub>3</sub>, Ta<sub>2</sub>O<sub>3</sub>, BaTiO<sub>3</sub>, BaZrO<sub>3</sub>, ZrO<sub>2</sub>, HfO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub> and ZrSiO<sub>4</sub>; the nitride Si<sub>3</sub>N<sub>4</sub>; or a semiconductor compound selected from the group consisting of CdS, ZnSe and ZnS.

8. (Currently Amended) The quantum dot light-emitting diode according to claim 2, wherein the inorganic quantum dot light-emitting layer is made of a material selected from the group consisting of: Group II-VI compound semiconductor nanocrystals, including CdS, CdSe, CdTe, ZnS, ZnSe, ZnTe, HgS, HgSe and HgTe; Group III-V compound semiconductor nanocrystals, including GaN, GaP, GaAs, InP and InAs; PbS; PbSe; PbTe; CdSe/ZnS; CdS/ZnSe; and InP/ZnS.

9. (Previously Presented) The quantum dot light-emitting diode according to claim 2, wherein the inorganic electron transport layer is formed by a solution coating process selected from the group consisting of sol-gel coating, spin coating, printing, casting and spraying, or a vapor coating process selected from the group consisting of chemical vapor deposition (CVD), sputtering, e-beam evaporation and vacuum deposition.

10. (New) A quantum dot light-emitting diode comprising:  
a top electrode;  
a bottom electrode disposed substantially opposite the top electrode;  
an inorganic quantum dot light-emitting layer provided between the top electrode and the bottom electrode; and  
an inorganic electron transport layer disposed between the inorganic quantum dot light-emitting layer and the top electrode,  
wherein the inorganic electron transport layer includes an oxide selected from the group consisting of TiO<sub>2</sub>, ZnO, SiO<sub>2</sub>, SnO<sub>2</sub>, WO<sub>3</sub>, Ta<sub>2</sub>O<sub>3</sub>, BaTiO<sub>3</sub>, BaZrO<sub>3</sub>, ZrO<sub>2</sub>, HfO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub> and ZrSiO<sub>4</sub>; the nitride Si<sub>3</sub>N<sub>4</sub>; or a semiconductor compound selected from the group consisting of CdS, ZnSe and ZnS.